WHAT IS CLAIMED IS:

- 1. An electrode-connector protecting cap, comprising:
- a hemisphere cap;
- a wing positioned at a periphery of the hemisphere cap and having a contact surface connected to the electrode-connector; and

an opening for wire to be passed through and formed in the hemisphere cap.

- 2. The electrode-connector protecting cap as claimed in claim 1,wherein the hemisphere cap is formed by a transparent plastic.
 - 3. The electrode-connector protecting cap as claimed in claim 1, wherein the wing further comprises adhesive to be connected to the hemisphere cap.

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- 4. The electrode-connector protecting cap as claimed in claim 1, wherein the wing consists of three portions with 120° spaced from one another.
- 5. The electrode-connector protecting cap as claimed in claim 1,wherein the wing is of a loop shape.
 - 6. The electrode-connector protecting cap as claimed in claim 1, wherein the wing has a groove.

- 7. The electrode-connector protecting cap as claimed in claim 1, wherein the opening is positioned at the periphery of the hemisphere cap.
- 8. The electrode-connector protecting cap as claimed in claim 1, further
 comprising a tube through which the wire is passed, and contacted around the opening of the hemisphere cap.
 - 9. The electrode-connector protecting cap as claimed in claim 8, wherein the tube is of an arch shape.

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- 10. The electrode-connector protecting cap as claimed in claim 8, wherein the tube has a wire fixing portion that can securely hold the wire.
- 11. The electrode-connector protecting cap as claimed in claim 10,15 wherein the wire fixing portion is of a protruded shape.
 - 12. An electrode-connector for ambulatory physiological signal measurement, comprising:
 - an electrode-connector having an electrode, a wire, a foam pad surrounding sides of the electrode, an electrode connecting portion taking one of a protruded shape and a recessed shape and electrically connected to the electrode, and a connector taking the other and electrically connected to the wire; and

an electrode-connector protecting cap as claimed in any one of the preceding claims.